### **REMARKS**

Applicants respectfully request entry of the Amendment and reconsideration of the rejections of the claims.

Applicants have amended claims 1 and 31. Claim 1 has been amended to clarify the subject matter of the claim. Claim 31 was amended to provide identification of the sequences of the SEQ ID NOs as wild type sequences. The amendments to the claims are supported throughout the specification including at the Table on page 40; and page 6, lines 25-37.

Applicants have added new claims 55-58. The new claims are supported throughout the specification including in Figure 1 and Figure 2.

### **Interview Summary**

Applicants thank Examiner Tran and her supervisor for the interview on November 1, 2005. We discussed the 102 (b) and 103 rejections of record over the '356 patent. Applicants pointed out that the SEQ ID NO:14 identified by the Examiner in the rejection is a leader sequence. The Examiner and supervisor agreed that this sequence does not anticipate Applicant's claims. We discussed an amendment to claim 1 to clarify the subject matter of the claim as a fusion protein comprising at least a portion of a variant of a wild type major coat protein of a virus.

### **Information Disclosure Statement**

Applicants note that in the Information Disclosure Statement submitted on February 26, 2004, the Examiner did not acknowledge consideration of 6,054,312 and 6,190,908. These references are being resubmitted along with additional references. Applicants request review of the references and return of the initialed 1449 form.

# Rejection under 35 U.S.C. 102(b)

The Examiner rejects claims 1, 3-4, 7, 9, 11-12, 30-31, and 44 under 35 U.S.C. 102(b) as allegedly anticipated by U.S. Patent No. 5,770,356 (Light, II et al.). Specifically, the Examiner refers to SEQ ID NO: 14 of the '356 patent as a variant of the VIII coat protein. Applicants respectfully traverse.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference". *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987); *See also*, MPEP §2131.

The Examiner has not established that each and every claim limitation of independent claim 1 is disclosed in the '356 patent. The Examiner asserts that SEQ ID NO: 14 at col. 23, lines 40-41 is a variant of the cp VIII major coat protein (Office Action at p. 7). SEQ ID NO: 14 is a cp VIII leader sequence (see Title of Table 1 at col. 23, line 19 of the '356 patent) of a wild-type cp VIII. According to the '356 patent, leader sequences are found at the N terminal end of the vector and provide for secretion of the polypeptide into the periplasmic space. (See col. 8, lines 27-32 of the '356 patent.) As shown in Figure 6 of the '356 patent, leader sequences are typically removed. As discussed above, the Examiner agrees that this sequence does not anticipate the claims.

In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of the rejections under 35 U.S.C. §102(b).

## Rejection under 35 U.S.C. 103(a)

The Examiner rejects claims 1, 3-4, 7-9, 11-12, 30-33, and 44 under 35 U.S.C. 103(a) as allegedly obvious over U.S. Patent No. 5,770,356 (Light, II et al.) in combination with U.S. Patent No. 6,794,128 (Marks et al.). Applicants respectfully traverse.

To establish a *prima facie* case of obviousness, three criteria must be met--a suggestion or motivation to combine references, a reasonable expectation of success, and the prior art reference teaches or suggests all the claim limitations. MPEP §2143; *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991). The Examiner has not established a *prima facie* case of obviousness since, in the least, the Examiner has not established that the prior art references teach or suggest all of the claim limitations.

The Examiner asserts that SEQ ID NO: 14 from the '356 patent is a gene VIII coat protein variant. The Examiner combines the '356 patent with the '128 patent, which discloses an antibody phage display library, wherein the antibody is fused to a gene III minor coat protein. As discussed above, SEQ ID NO: 14 from the '356 patent is a leader sequence and does not teach or suggest a fusion protein as claimed. Moreover, the '356 patent does not teach or suggest

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that variants of a wild-type major coat protein can or should be made and would be able to provide for proper phage display. The deficiencies of the '356 patent are not remedied by reference to the Marks et al. patent ('128). Thus, Applicants submit that even when the references are combined they do not disclose all of the elements of Applicants' claims.

In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of the rejections under 35 U.S.C. §103(a).

### **SUMMARY**

Applicants submit that the claims are in condition for allowance and notification to that effect is earnestly solicited. The Examiner is invited to contact Applicants' representative if prosecution may be assisted thereby.

Respectfully submitted,

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